# UNITED STATES PATENT AND TRADEMARK OFFICE

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| 10/786,029 | 02/26/2004 | Gerhard D. Klassen | 42783-0041 | 2912 |

| | | | EXAMINER |
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| 23577 7590 04/20/2006 | | | WASHBURN, DANIEL C |

RIDOUT & MAYBEE
SUITE 2400
ONE QUEEN STREET EAST
TORONTO, ON  M5C3B1
CANADA

| ART UNIT | PAPER NUMBER |
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| 2628 | |

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *15 February 2006*.

2a)☒ This action is **FINAL**.    2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-25* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 2/15/06 have been fully considered but they are not persuasive.

As to the applicant's argument that Hill et al. (US 6,870,535) doesn't disclose storage of a custom character set in an image file, locating a selected character within the custom character set, defining a portion of the image containing the selected character, and rendering that portion on an output device, the examiner contests that Hill describes exactly such a method. Hill describes that his disclosed font generation tool is provided for the creation of sophisticated fonts which allow for the creation of a structure from which fonts can be derived. Hill further describes that the principles of his invention are applicable to bitmap generated end fonts (column 6 lines 38-49), which means final output of the font creation tool is a bitmapped image that represents a character primitive (a character before attributes are added) and all its associated user-defined attributes. A bitmapped image isn't the only type of output from the font creation tool, but it is one of the disclosed outputs. Given the suggested bitmap font image as an output, Hill's disclosed font file provides a means for storing the bitmap font image custom character set. Hill discloses a font file that can store created character glyphs. The font file may include a font header, a character code for each character, a kerning table, and, if needed, a glyph index for each character, typesetting information for each character, graphics context attribute settings for the graphics context of the font, tree structures (graphic object trees) for each glyph including pointers to shape and

image data, shape data, and image data (column 5 lines 5-18). If the stored character

glyphs are a vector-based collection of graphical objects then a glyph index for each

character, typesetting information for each character, graphics context attribute settings,

tree structures, shape data, and image data may all be required, but if the stored

characters are bitmapped images, then the only information that may be required is a

character code (or, alternatively, a glyph number) for each character, and a kerning

table. The disclosed font file is considered an image file as it can store bitmap images

of a custom character set. The disclosed character code (or glyph number) for each

character is considered a means to locate a selected character within the custom

character set, and the system renders the selected portion of the image file on an output

device on command (column 8 lines 39-64).

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-3, 5-11, 13-17, 19, and 20 are rejected under 35 U.S.C. 102(e) as being

anticipated by Hill et al. (US 6,870,535).

Regarding claims 1 and 15, Hill describes, in a user device, a method and

computer program product having a computer-readable medium tangibly embodying

computer executable instructions for rendering text on an output device in a user

device, the user device including an image file defining an image of a custom character

set, the user device having stored thereon associated character information, the

associated character information including at least one character width for said custom

character set, the user device having a graphics subsystem for rendering images on the

output device, the computer executable instructions comprising: computer executable

instructions for locating a selected character from the custom character set within the

image based upon the associated character information; and computer executable

instructions for defining a portion of the image containing the selected character,

wherein the graphics subsystem renders the portion on the output device. For example,

Hill describes a method of creating a custom character set for use on a computer

system column 2 lines 12-39. He further describes that the characters may be stored

as image data in the form of pixel maps column 3 lines 42-47 and that the system stores

associated character information such as color, opacity, draw style, a horizontal

typesetting position (x, y), and a horizontal typesetting vector (dx, dy). The stored

horizontal typesetting vector for each character is considered stored information about

the character's width column 4 lines 18-52. Each character, or glyph, has a

corresponding glyph number; the program uses the glyph number when it is trying to

find a particular character, within the set of character images, to render on the display in

a particular location column 3 lines 19-27. Figure 16 illustrates a user device that the

described program can operate on. The program is stored in memory 156, which is a

computer-readable medium. The user device includes video interface 157 and

processor 155, which are considered to be a graphics subsystem that renders images

on the output device 154.

   As to claims 2, 10, and 16, Hill discloses a method, device, and computer

program product wherein the computer executable instructions for defining include the

computer executable instructions for defining a subimage within the image; the

subimage having a width corresponding to the at least one character width. For

example, Hill describes that each glyph, or character, has an associated glyph index

number used to reference the overall glyph. The glyph index number defines each

glyph subimage within the image that includes all of the glyphs. Each glyph has

associated typesetting information corresponding to a horizontal and vertical vector

describing the width and height of the character, which means the subimage of a

particular character has a width corresponding to the character's width column 3 lines

19-27 and column 4 lines 44-52.

   With regard to claim 3, 9, and 17, Hill includes a method, device, and computer

program product wherein the computer executable instructions for defining include the

computer executable instructions for creating a definition and passing the definition to

the graphics subsystem, wherein the graphics subsystem performs the step of rendering the defined character. For example, Hill describes creating a font from glyphs and storing the information in a font file column 5 lines 4-18. Hill further describes creating multiple instances of the same font, where each instance is referred to by a graphics context number column 5 lines 49-64. The methods of creating a font from glyphs and customizing the font while creating multiple instances of it are considered creating a definition. This definition is passed to the graphics subsystem, which in this case is the processor and video interface of Figure 16, wherein the graphics subsystem performs the step of rendering the defined character on the display device 154.

Regarding claims 5, 13, and 19, Hill describes a method, device, and computer program product wherein the image file comprises a bitmapped image file. For example, Hill describes that the character image files may be in the form of a pixel map, which is considered equivalent to a bitmap column 3 lines 42-47. Hill later describes that some of the font manipulations described are best suited for bit map generated fonts column 6 lines 42-44.

As to claims 6, 14, and 20, Hill includes a method, device, and computer program product wherein the output device comprises a display, and the step of rendering includes rendering the portion containing the specific character on the display. For example, Hill offers Figure 16, which illustrates video display 154. Hill also describes that the video display displays video signals from the computer module, which is considered to include rendering specific characters on the display column 8 lines 39-48.

With regard to claim 7, Hill describes a method including the steps of developing

the custom character set off-line and creating and storing the image file on the user

device. For example, Hill discloses a user interface that allows a user to test various

manipulations of a character and then allows the user to create a complete font set

based on the final version of the customized character column 7 lines 64-67 and column

8 lines 1-23. The custom character set development is independent of an Internet

connection, which means it can be created while the user is off-line, and it is created

and then stored in memory so the user can access it later.

Concerning claim 8, Hill describes a user device, comprising: an output device; a

graphics subsystem for rendering graphics upon the output device; memory, the

memory having stored thereon an image file defining an image of a custom character

set and associated character information, the associated character information including

at least one character width for the custom character set; and a custom font module for

locating a selected character from the custom character set within the image file based

upon the associated character information, and defining a portion of the image

containing the selected character, wherein the graphics subsystem renders the portion

on the output device. For example, Hill includes Figure 16, which illustrates a computer

system that comprises video display 154 and a video interface 157 coupled to

processor 155. The video interface 157 and processor 155 are considered a graphics

subsystem for rendering graphics upon the output device, or display screen, 154.

Figure 16 also illustrates memory 156, memory 156 has a font creation program stored

on it which allows the user to create an image of a custom character set and associated

character information column 8 lines 16-23, which includes defining a character width

for each custom character in the font set column 4 lines 44-52.  Finally, Hill includes a

custom font module that selects the requested character from a created custom

character set using the character's glyph index number, defines the bounds of the

selected character using the associated typesetting information, and renders the

selected character on the display screen column 3 lines 19-25 and column 4 lines 44-

52.

Regarding claim 11, Hill describes a device wherein the custom font module

executes within the graphics subsystem.  For example, Hill offers Figure 16, which

illustrates a computer system that comprises a processor 155, video interface 157, and

video display 154.  The processor and video interface are considered to be a graphics

subsystem and the processor, which is part of the graphics subsystem, executes the

custom font module.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4, 12, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Hill et al. (US 6,870,535).

Concerning claims 4, 12, and 18, Hill discloses a method, device, and computer

program product wherein the associated character information includes a character

order, and the computer executable instructions for locating include the computer executable instructions for identifying the location in the image of the selected character based upon the character order. For example, Hill describes that the created characters are referenced by an assigned glyph index number, which is considered a character order column 3 lines 14-27. Hill doesn't describe that the created characters are also located based on the character's width.

However, Hill does describe that each character has an associated character width column 4 lines 44-53. It would have been obvious to one of ordinary skill in the art at the time of the invention to include in Hill the method of using the character width along with the character order to locate a specific character in order to create an algorithm that grabs a specified character based on the character order number and then double checks that the character is the correct character by comparing its width to the stored value of the character width that is associated with the character order number. The improvement of referencing a character based on its character order and its character width is that the system will be less likely to present the wrong character when a discrepancy occurs.

Claims 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hill et al. (US 6,870,535) in view of Manning (6,043,826).

As to claim 21, Hill describes a user device, comprising: a display screen, a graphics subsystem coupled to the display screen for rendering graphics upon the display screen; a memory, the memory containing an image file defining an image, said image including a custom character set, the memory further containing associated

character information, the associated character information including character order

information and at least one character width for the custom character set; a custom font

module for locating a portion of the image containing a selected character from the

custom character set within the image file based upon the associated character

information, and producing a definition defining the portion of the image containing the

selected character, wherein the graphics subsystem receives the definition and renders

the portion on the display screen, as discussed in the rejection of claim 8. Hill doesn't

describe that the device is mobile.

However, Manning describes a handheld mobile personal computer that uses

raster fonts to display characters on its display. The handheld personal computer

includes a processor, memory, and input/output components such as a display and a

small keyboard column 3 lines 1-29 and column 4 lines 39-48. It would have been

obvious to one of ordinary skill in the art at the time of the invention to include in Hill the

handheld personal computer as taught by Manning in order to allow the user to edit and

create fonts using a mobile device that the user can easily carry around and access at

any number of locations, including coffee shops, malls, parks, work, home, etc.

Regarding claim 22, Manning describes a mobile device that is a handheld

mobile device. For example, Manning describes that auxiliary computer 14, of Figure 1,

is a handheld personal computer column 3 lines 1-3.

Concerning claim 23, Hill describes that the image file includes a file having a

standard image format. For example, Hill describes that character image data can be in

the form of pixel maps (considered equivalent to bit maps), which may or may not be in

a compressed format column 3 lines 44-46. Pixel map format is considered a standard image format.

With regard to claims 24 and 25, Hill describes a device wherein the custom character set includes a plurality of glyphs comprising a font, and wherein the selected character includes two or more adjacent glyphs. For example, Hill includes that a font is represented by a series of character glyphs, a glyph being a sculptured character or symbol. A combination of glyphs creates images (such as letters and numbers) having much more complex characteristics column 3 lines 14-18.

## Conclusion

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571) 272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system.  Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Note: The examiner's art unit number has changed, the new art unit number is 2628.

*D W*

DW

4/14/06

ULKA CHAUHAN
SUPERVISORY PATENT EXAMINER